

Express Mail No. EV178020986US

PATENT APPLICATION OF
CRAIG P. EGAN
ENTITLED
MOTORCYCLE FOOT PEG WITH FOLDING HEEL REST

Docket No. K35.12-0009

MOTORCYCLE FOOT PEG WITH FOLDING HEEL REST

BACKGROUND OF THE INVENTION

The present invention relates to a motorcycle foot rest or foot peg that has a heel rest
5 that will pivot from a stored position rested against edges of the foot rest to a working position extended from the foot rest, to support the heel of a rider's foot on the foot peg.

In the past, various stirrups and foot pegs
10 have been advanced for use with motorcycles to support the ball of a rider's foot.

Foot pegs with heel rests also have been used, but the existing heel rests are fixed in position relative to the foot peg itself, so that in instances
15 where additional clearance is desired around the foot peg, or the heel rest is not wanted, the heel rests remain in the extended position.

SUMMARY OF THE INVENTION

The present invention relates to a foot peg
20 for mounting onto a motorcycle frame, for supporting the feet of the rider or a passenger. The foot peg includes a heel rest comprising an arm having a heel support wall portion. The arm will fold up against edges of the foot peg when not in use. When pivoted
25 out to the usable or working position, a support surface is positioned so a heel of the rider's foot can be placed on the support while the ball or other portions of the foot are on the foot peg itself.

The folding heel rests will work in any
30 foot peg location, but they are ideal for motorcycles

that have forward controls, or forward-mounted cruise pegs or "highway" pegs.

In the folded compact mode, the heel rest folds against the rear edge and outer end edge of the foot peg so that the heel rest is out of the way, and the exposed surfaces of the heel rest add a decorative appearance to the foot peg. The wall that supports the heel fits under the foot peg, so it is completely hidden and out of the way. The heel rest arm pivots easily to its usable position, so that when a person has the ball of the foot on the foot peg, the heel of that foot will rest on a surface that is supported on an arm pivoted to the foot peg. The support for the heel reduces fatigue and increases rider comfort.

The foot pegs are easily installed on any suitable support on a motorcycle frame or on an accessory bar or bracket. The foldability increases the versatility of foot supports or pegs on a motorcycle.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a top plan view of a foot peg made according to the present invention installed on a fragmentary schematic representation of a mounting bar of a motorcycle frame;

Figure 2 is a perspective view of the foot peg of the present invention showing the heel rest in its deployed or usable working position;

Figure 3 is an outer end view of the foot peg shown in Figure 1;

Figure 4 is an outer end view of the foot peg with the heel rest in folded or stored position
5 with an end leg broken away;

Figure 5 is a perspective view of the foot peg shown in Figure 1 with the heel rest in its folded or stored position, with the heel rest is folded against edges of the foot peg; and

10 Figure 6 is a top plan view of the foot peg with the heel rest in the stored position.

DETAILED DESCRIPTION OF THE ILLUSTRATIVE EMBODIMENTS

In Figures 1 and 2, the illustration of a motorcycle frame member 10 is for illustrative
15 purposes, and is shown only schematically. In the form shown in Figure 1, for illustrative purposes for showing a mounting of the present invention, bracket 14 is supported on the frame 10, and a foot peg assembly 16 is held on the bracket 14. If desired the
20 bracket 14 can be attached to the highway cruise bar that extends across the motorcycle frame. The foot peg assembly 16 is bolted or otherwise mounted on bracket 14.

The foot peg assembly 16 is shown in more
25 detail in Figures 2 through 6, and includes a foot support peg 18, that, as shown, has a metal frame 20, and elastomeric material vibration isolation and friction strips 22 spaced along the upper surface. In addition, an elastomeric end cap 23 is positioned

over an outer end of the metal frame 20. The strips 22 and end cap 23 are held in place in a suitable manner. The foot peg frame 20 has a mounting ear 24 that is used for attaching the foot peg to the
5 bracket 14 on cruise bar 12, or an other frame bracket on a motorcycle, with a suitable bolt, cap screw or other fastener.

A separate foot peg assembly 16 extends laterally out from the motorcycle frame on both
10 sides, and each foot peg assembly is in position to support a foot of a rider of the motorcycle when rider is not engaged in shifting or the like. The foot peg 18 is of suitable size for supporting the foot.

15 The foot peg assembly 16 of the present invention has an inner end flange 20A that supports vertically spaced hubs 26 on an inner, rear side of the foot peg frame 20. The spaced hubs 26 receive a hub 32 of a heel rest assembly 30. The hub 32 fits
20 between the hubs 26, and a pivot pin 28 is used for pivotally mounting the heel rest assembly to the frame 20 of the foot rest peg 18 about the pivot axis of pin 28. The heel rest assembly 30 is part of the foot peg assembly 16. The inner end flange 20A has a
25 spring loaded detent 21 shown schematically in Figure 1 where a portion of the flange 20A is broken away. The detent 21 will engage detent recesses 23A and 23B in the hub 26 to retain heel rest assembly in working

position shown in Figure 1 and a folded position of Figure 5.

The heel rest assembly 30 has an elongated support arm 34 extending from hub 32, which is of length and shape so that when it is extended rearwardly out from the foot peg, a wall portion 38 that is supported on the arm 34 will be positioned to support the heel of a boot or shoe on the foot peg. The arm has an inwardly extending flange 34A (see Figure 3) that is under and supports the bottom of wall portion 38.

A laterally extending leg 40 is integral with the arm 34 and extends perpendicular to arm 34 and supports the outer or base end of wall portion 38. The leg 40 extends upwardly from above the wall 38 as does the arm 34 to form an open sided cup. The wall portion 38 also can have a flange 39A that extends upwardly along the inner surface of arm 34 and a flange 39B that extends upwardly along the inner surface of laterally extending leg 40. The leg 40 forms a stop or barrier to keep the heel from slipping off the wall 38. The arm 34 wall portion 38 and leg 40 are rounded and shaped to provide a pleasing appearance.

The heel rest wall portion 38 has an opening 42 adjacent to the corner where arm 34 and leg 40 meet, so that dirt, rocks and other material will not build up in that corner.

A replaceable, ball ended peg 41 is threaded into a threaded bore or receptacle on the underside of the leg 40 at the outer end of leg 40 and the flange 34A. Thus peg 41 is a "grind peg" that
5 will protect folding arm 34 and leg 40 from abrasion when or if the motorcycle is leaned over during a turn. The peg 41 can be replaced from time to time if worn.

Normally, the pivot axis of the pivot 28 is
10 oriented relative to a central longitudinal plane of the foot peg defined by the front and rear longitudinal edges so that when the foot pegs are mounted on a bracket 14 with ear 24, the heel rest arm 34 inclines downwardly. In other words, the rear
15 part of heel rest wall portion 38 and lateral leg 40 would be lower than the foot peg 18. The ball or instep of the foot of a rider rests on the peg 18.

The heel rest arm 34 also can have decorative and protective ribs 44 mounted on the
20 outer side thereof. The heel rest arm 34, wall 38 and leg 40 will pivot to a closed or stored position, as shown in Figures 4-6. This forms a very compact foot support when the heel rest is not used.

When folded, the arm 34 extends along a
25 rear longitudinal length edge of the foot peg 18, and leg 40 fits along the outer side edge. The frame 20 is configured to accommodate the heel rest wall 38 when the heel rest assembly is pivoted to the stored position. The heel rest wall 38 slides under the

outer and rear end 20C of the frame 20 of footrest 18 as shown in Figure 4, where leg 40 and flange 39 are broken away at the inner edge of flange 39B. The support flange 34A is shown in cross section in
5 Figure 4. Flange 34A has an opening so a portion 38B of the heel rest wall 38 surrounding opening 42 protrudes down. The arm 34 and leg 40 are contoured on their outer surfaces so the foot peg assembly looks finished and attractive when the heel rest is
10 folded to the stored position. The surface of the arm 34 that is visible along the back edge of the foot peg provides a decorative, streamlined, finished look, as does the leg 40 when in its stored or folded position. The leg 40 blends in with the frame 20 and
15 end covering of the foot peg. The heel rest is retained in folded position with the detent 21 and access 23B until it is manually pivoted to the working position.

The feature of being able to pivot the heel
20 rest from a stored or folded position (Figures 4, 5 and 6) where the heel rest wall is substantially concealed and out of the way, to a working or usable position 90° from its stored position for use as a heel rest (Figures 1-3) increases the usefulness of
25 the foot peg or footrest. The folded heel rest arm 34 extends along the rear edge of the foot peg and the leg 40 fits around the outer end of the foot peg, as shown, so the entire heel rest is well concealed and looks as if it is just the finishing touch on the

foot peg. The heel rest is highly usable in its opened or deployed position as shown in Figures 1-3.

The size of the heel rest wall portion 38 can be varied, but as shown, it is generally adequate
5 to have it only partially extend along the arm 34 from leg 40 toward the pivot pin 28. The heel rest wall 38 does have a curved inner edge 50. Adequate surface area for supporting the heel is maintained. The heel rest wall 38 can be made of a synthetic
10 material, and can have a non-skid surface if desired. The heel of a rider's shoe or boot is cradled by the arm 40 and arm 34 as it rests on heel rest wall 38.

Although the present invention has been described with reference to preferred embodiments,
15 workers skilled in the art will recognize that changes may be made in form and detail without departing from the spirit and scope of the invention.